RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 1

Source:

Date Processed by STIC:

ENTERED



IFWP

RAW SEQUENCE LISTING DATE: 06/14/2006
PATENT APPLICATION: US/10/538,772 TIME: 10:50:10

Input Set : A:\P28025.ST25.txt

```
3 <110> APPLICANT: RIKEN
         MIYAWAKI, Atsushi
  4
          NAGAI, Takeharu
  7 <120> TITLE OF INVENTION: Fluorescent Indicator Using FRET
  9 <130> FILE REFERENCE: P28025
 11 <140> CURRENT APPLICATION NUMBER: 10/538,772
· 12 <141> CURRENT FILING DATE: 2005-06-10
 14 <150> PRIOR APPLICATION NUMBER: PCT/JP2003/015790
 15 <151> PRIOR FILING DATE: 2003-12-10
 17 <150> PRIOR APPLICATION NUMBER: JP2002-357768
 18 <151> PRIOR FILING DATE: 2002-12-10
 20 <160> NUMBER OF SEQ ID NOS: 45
 22 <170> SOFTWARE: PatentIn version 3.3
 24 <210> SEQ ID NO: 1
 25 <211> LENGTH: 26
 26 <212> TYPE: PRT
 27 <213> ORGANISM: animal
 29 <400> SEQUENCE: 1
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 35 Phe Lys Lys Ile Ser Ser Ser Gly Ala Leu
 36
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                                     25
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 40 <211> LENGTH: 20
 41 <212> TYPE: PRT
 42 <213> ORGANISM: animal
 44 <400> SEQUENCE: 2
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 47 1
 50 Arg Leu Ser Ser
 54 <210> SEQ ID NO: 3
 55 <211> LENGTH: 20
 56 <212> TYPE: PRT
 57 <213> ORGANISM: animal
 59 <400> SEQUENCE: 3
 61 Ala Arg Arg Lys Leu Lys Gly Ala Ile Leu Thr Thr Met Leu Ala Thr
 65 Arg Asn Phe Ser
 69 <210> SEQ ID NO: 4
 70 <211> LENGTH: 17
 71 <212> TYPE: PRT
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PATENT APPLICATION: US/10/538,772 DATE: 06/14/2006 TIME: 10:50:10

Input Set : A:\P28025.ST25.txt

Output Set: N:\CRF4\06142006\J538772.raw

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74 <400> SEQUENCE: 4
76 Gly Val Arg Asn Ile Lys Ser Met Trp Glu Lys Gly Asn Val Phe Ser
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80 Ser
84 <210> SEQ ID NO: 5
85 <211> LENGTH: 20
86 <212> TYPE: PRT
87 <213> ORGANISM: animal
89 <400> SEQUENCE: 5
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95 Arg Leu Gly Ser
96
99 <210> SEQ ID NO: 6
100 <211> LENGTH: 26
101 <212> TYPE: PRT
102 <213> ORGANISM: animal
                          104 <400> SEQUENCE: 6
106 Phe Met Asn Asn Trp Glu Val Tyr Lys Leu Leu Ala His Ile Arg Pro
107 1 5
                               10
110 Pro Ala Pro Lys Ser Gly Ser Tyr Thr Val
111
     20
114 <210> SEQ ID NO: 7
115 <211> LENGTH: 24
116 <212> TYPE: PRT
117 <213> ORGANISM: animal
119 <400> SEQUENCE: 7
121 Ala Arg Lys Glu Val Ile Arg Asn Lys Ile Arg Ala Ile Gly Lys Met
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122 1
125 Ala Arg Val Phe Ser Val Leu Arg
126
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129 <210> SEQ ID NO: 8
130 <211> LENGTH: 26
131 <212> TYPE: PRT
132 <213> ORGANISM: animal
134 <400> SEQUENCE: 8
136 Leu Arg Arg Leu Ile Asp Ala Tyr Ala Phe Arg Ile Tyr Gly His Trp
137 1 5
140 Val Lys Lys Gly Gln Gln Asn Arg Gly
144 <210> SEQ ID NO: 9
145 <211> LENGTH: 27
146 <212> TYPE: PRT
147 <213> ORGANISM: animal
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151 Arg Gly Lys Phe Lys Val Ile Cys Leu Thr Val Leu Ala Ser Val Arg
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155 Ile Tyr Tyr Gln Tyr Arg Arg Val Lys Pro Gly

RAW SEQUENCE LISTING DATE: 06/14/2006
PATENT APPLICATION: US/10/538,772 TIME: 10:50:10

Input Set : A:\P28025.ST25.txt

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156
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164 <400> SEQUENCE: 10
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170 Thr Gln Ile Lys Val Val Asn Ala Phe Ser Ser Ser
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                                   25
174 <210> SEQ ID NO: 11
175 <211> LENGTH: 21
176 <212> TYPE: PRT
177 <213> ORGANISM: animal
179 <400> SEQUENCE: 11
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185 Lys Gln Leu Glu Lys
186 20
                           . . . . .
                                                   Free States
189 <210> SEQ ID NO: 12
190 <211> LENGTH: 21
191 <212> TYPE: PRT
192 <213> ORGANISM: animal
194 <400> SEQUENCE: 12
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200 Lys Gln Leu Glu Lys
201
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204 <210> SEQ ID NO: 13
205 <211> LENGTH: 23
206 <212> TYPE: PRT
207 <213> ORGANISM: animal
209 <400> SEQUENCE: 13
211 Lys Arg Arg Ala Ile Gly Phe Lys Lys Leu Ala Glu Ala Val Lys Phe
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215 Ser Ala Lys Leu Met Gly Gln
216
       20
219 <210> SEQ ID NO: 14
220 <211> LENGTH: 28
221 <212> TYPE: PRT
222 <213> ORGANISM: animal
224 <400> SEQUENCE: 14
226 Ile Lys Pro Ala Lys Arg Met Lys Phe Lys Thr Val Cys Tyr Leu Leu
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230 Val Gln Leu Met His Cys Arg Lys Met Phe Lys Ala
231
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234 <210> SEQ ID NO: 15
235 <211> LENGTH: 20
236 <212> TYPE: PRT
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RAW SEQUENCE LISTINGPATENT APPLICATION: US/10/538,772 DATE: 06/14/2006 TIME: 10:50:10

Input Set : A:\P28025.ST25.txt

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237 <213> ORGANISM: animal
239 <400> SEQUENCE: 15
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251 <212> TYPE: PRT
252 <213> ORGANISM: animal
254 <400> SEQUENCE: 16
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260 Ile Thr Arg Lys Lys Leu Lys Gly Glu Lys Lys
261
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266 <212> TYPE: PRT
267 <213> ORGANISM: animal
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275 Ala Thr Phe Asn Ser Ile Lys Glu
276
         20
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280 <211> LENGTH: 25
281 <212> TYPE: PRT
282 <213> ORGANISM: animal
284 <400> SEQUENCE: 18
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287 1 . 5
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290 Gly Phe Ser Phe Lys Lys Ser Lys Lys
              20
294 <210> SEQ ID NO: 19
295 <211> LENGTH: 24
296 <212> TYPE: PRT
297 <213> ORGANISM: animal
299 <400> SEQUENCE: 19
301 Lys Lys Lys Lys Phe Ser Phe Lys Lys Pro Phe Lys Leu Ser Gly
                  5
                                     10
305 Leu Ser Phe Lys Arg Asn Arg Lys
               20
309 <210> SEQ ID NO: 20
310 <211> LENGTH: 31
311 <212> TYPE: PRT
312 <213> ORGANISM: animal
314 <400> SEQUENCE: 20
316 Lys Gln Gln Lys Glu Lys Thr Arg Trp Leu Asn Thr Pro Asn Thr Tyr
317 1
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RAW SEQUENCE LISTING DATE: 06/14/2006 PATENT APPLICATION: US/10/538,772 TIME: 10:50:10

Input Set : A:\P28025.ST25.txt

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321
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324 <210> SEQ ID NO: 21
325 <211> LENGTH: 21
326 <212> TYPE: PRT
327 <213> ORGANISM: animal
329 <400> SEQUENCE: 21
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                      10
332 1
335 Gly Leu Glu Val Ile
       20
339 <210> SEQ ID NO: 22
340 <211> LENGTH: 21
341 <212> TYPE: PRT
342 <213> ORGANISM: animal
344 <400> SEQUENCE: 22
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                        , 10
350 Leu Leu Gly Arg Arg.
    . 20
351
354 <210> SEQ ID NO: 23
355 <211> LENGTH: 23
356 <212> TYPE: PRT
357 <213> ORGANISM: animal
359 <400> SEQUENCE: 23
361 Gln Gln Leu Ala Thr Leu Ile Gln Lys Thr Tyr Arg Gly Trp Arg Cys
362 1
                                      10
365 Arg Thr His Tyr Gln Leu Met
       . 20
369 <210> SEQ ID NO: 24
370 <211> LENGTH: 24
371 <212> TYPE: PRT
372 <213> ORGANISM: animal
374 <400> SEQUENCE: 24
376 Arg Ala Ala Cys Ile Arg Ile Gln Lys Thr Ile Arg Gly Trp Leu Leu
377 1 5
                                      10
380 Arg Lys Arg Tyr Leu Cys Met Gln
381
              20
384 <210> SEQ ID NO: 25
385 <211> LENGTH: 12
386 <212> TYPE: PRT
387 <213> ORGANISM: animal
389 <400> SEQUENCE: 25
391 Ile Asn Leu Lys Ala Ala Leu Ala Lys Lys Ile Leu
392 1
           5
395 <210> SEQ ID NO: 26
396 <211> LENGTH: 26
397 <212> TYPE: PRT
398 <213> ORGANISM: animal
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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 06/14/2006 PATENT APPLICATION: US/10/538,772 TIME: 10:50:11

Input Set : A:\P28025.ST25.txt

Output Set: N:\CRF4\06142006\J538772.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:36; Xaa Pos. 4 Seq#:38; Xaa Pos. 2 Seq#:39; Xaa Pos. 3,4 VERIFICATION SUMMARY

DATE: 06/14/2006

PATENT APPLICATION: US/10/538,772

TIME: 10:50:11

Input Set : A:\P28025.ST25.txt

Output Set: N:\CRF4\06142006\J538772.raw

L:550 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:0 L:578 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0 L:595 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:0